A comparative study of hydrostatic pressure treated en CsXBr3 (X = Ge/Sn) for optoelectronic applications

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Citation Report

#	Article	IF	Citations
1	Ultra-violet to visible band gap engineering of cubic halide KCaCl₃ perovskite under pressure for optoelectronic applications: insights from DFT. RSC Advances, 2021, 11, 36367-36378.	3.6	27
2	Electronic phase transition from semiconducting to metallic in cubic halide CsYbCl3 perovskite under hydrostatic pressure. Physica B: Condensed Matter, 2022, 630, 413650.	2.7	16
3	Band gap shifting of halide perovskite CsCaBr3 from ultra-violet to visible region under pressure for photovoltaic applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 278, 115645.	3.5	24
4	Structural, Elastic and Optoelectronic Properties of Inorganic Cubic Frbx3 (B = Ge, Sn; X = Cl, Br, I) Perovskite: The Density Functional Theory Approach. SSRN Electronic Journal, 0, , .	0.4	0
5	Structural, elastic and optoelectronic properties of inorganic cubic FrBX₃ (B = Ge, Sn; X =) Tj ETQq0 0 0 rgBT /Overlock 10	3.6	35
6	Structural and optoelectronic properties of CsSnBr3 metal halide perovskite as promising materials toward novel-generation optoelectronics. , 2022, 19, 153-162.		3
7	The optimized of tunable all-inorganic metal halide perovskites CsNBr3 as promising renewable materials for future designing of photovoltaic solar cells technologies. European Physical Journal B, 2022, 95, 1.	1.5	1
8	First-principles calculations to explore the metallic behavior of semiconducting lead-free halide perovskites RbSnX3 (Xâ€‰=â€‰Cl, Br) under pressure. European Physical Journal Plus, 2022, 137, .	2.6	13
9	First-principles prediction of outstanding mechanical and thermodynamic properties of YX2Si2 (XÂ=ÂPd) Tj ETQq0 0 0 rgBT /Overlock 10	1.9	5
10	Pressure induced variations in the optoelectronic response of ASnX3 (A=K, Rb; X=Cl, Br, I) perovskites: A first principles study. Materials Science in Semiconductor Processing, 2022, 150, 106977.	4.0	11
11	Understanding the role of rare-earth metal doping on the electronic structure and optical characteristics of ZnO. Molecular Systems Design and Engineering, 2022, 7, 1516-1528.	3.4	5
12	Pressure-induced phase transitions of CsSnBr₃ perovskite from first-principles calculations. Physica Scripta, 2022, 97, 115811.	2.5	1
13	First-principles study of physical, and superconducting properties of newly discovered full-Heusler compound MgPd ₂ Sb. Physica Scripta, 2022, 97, 125705.	2.5	6
14	Photovoltaic and related properties of Sn-doped disordered CsPbxSn1â^'xBr3 perovskite: a first-principles calculation. Journal of Materials Science, 2022, 57, 19846-19856.	3.7	0
15	Red shift of lead-free halide perovskite RbCaCl₃ under pressure for enhancing optoelectronic performance. Physica Scripta, 2023, 98, 035806.	2.5	0
16	Cesium-metalloid halide perovskites MBX3 (M1+= Cs; B2+= Si, Ge, Sn, Pb; Xâ€“= Cl, Br, I) as semiconductor photovoltaic materials for sustainable renewable-energy applications. , 2023, 19, 113-140.		2
17	Pressureâ€Induced Semiconductorâ€toâ€Metallic Transition of Monoclinic KCa₂Nb₃O₁₀ Layered Perovskite: A Theoretical DFT Insight. Crystal Research and Technology, 2023, 58, .	1.3	4
18	First-Principles Calculations to Investigate the Stability and Thermodynamic Properties of a Newly Exposed Lithiumâ€“Galliumâ€“Iridium-Based Full-Heusler Compound. ACS Omega, 2023, 8, 21885-21897.	3.5	4

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19	Enhanced surface morphology and photovoltaic properties of a new class of material copper silver bismuth iodide solar cell. Journal of Materials Research and Technology, 2023, 25, 4171-4186.	5.8	3
20	Pressure-Induced Band Gap Engineering of Nontoxic Lead-Free Halide Perovskite CsMgI₃ for Optoelectronic Applications. ACS Omega, 2023, 8, 24942-24951.	3.5	6
21	Comprehensive study of CsGeBr3 perovskite: optical, electronic, and thermoelectric properties. Emergent Materials, 2023, 6, 1685-1696.	5.7	2
22	Ab initio predictions of pressure-dependent structural, elastic, and thermodynamic properties of CaLiX3 (X = Cl, Br, and I) halide perovskites. Computational Condensed Matter, 2023, 37, e00850.	2.1	0
23	First-principles investigation on structural, electronic, magnetic, mechanical and thermodynamic properties of half-metallic Zn-based all-d-metal equiatomic quaternary Heusler alloys. Materials Today Communications, 2023, 37, 107565.	1.9	0
24	An Experimental and Simulation Study of Cu₆BiAgI₁₀ Photovoltaics with Various Organic and Inorganic Hole Transport Layers for the Improved Photovoltaic Performance of Solar Cells. Energy & Fuels, 0, , .	5.1	0
25	Assessing the impact of triaxial strain on carrier mobility and dielectric properties in cubic CsBCl3 (B) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.3	0
27	Boosting efficiency above 30Â% of novel inorganic Ba3SbI3 perovskite solar cells with potential ZnS electron transport layer (ETL). Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2024, 300, 117073.	3.5	2
28	Tuning of band gap and enhancing electronic properties of CsSnBr3 under high pressure for optoelectronic applications. Computational Condensed Matter, 2024, 38, e00870.	2.1	0
29	A computational study of electronic, optical, and mechanical properties of novel Ba3SbI3 perovskite using DFT. Optical and Quantum Electronics, 2024, 56, .	3.3	3
30	Analysis of the structural, electronic, optical and mechanical properties of CsGeI2Br under tensile and compressive strain for optoelectronic applications: A DFT computational perspective. , 2024, 186, 207750.		0
31	Pressure-induced band gap engineering and enhanced optoelectronic properties of non-toxic Ca-based perovskite CsCaCl3: Insights from density functional theory. Computational Condensed Matter, 2024, 38, e00879.	2.1	2
32	TlBX3 (B = Ge, Sn; X = Cl, Br, I): Promising non-toxic metal halide perovskites for scalable and affordable optoelectronics. Journal of Materials Research and Technology, 2024, 29, 897-909.	5.8	4
33	A (GGA+PBE) investigation of MGeBr3 (M = Rb, Cs, Fr) bromide perovskites: structural, electronic, and optical characteristics. Digest Journal of Nanomaterials and Biostructures, 2024, 19, 25-40.	0.8	0
34	Unveiling the pressure-driven modulations in AGeF3 (A = Na, Tl) cubic perovskite halides for enhanced optoelectronic performance. Computational Condensed Matter, 2024, 38, e00887.	2.1	1
35	A comparative study of the structural, mechanical, electronic, and optical properties of lead-free cubic AGeX3 (AÂ=ÂCs, K, and Rb; XÂ=ÂCl, Br, and I) perovskites: Insights from DFT simulation. Results in Physics, 2024, 57, 107405.	4.1	0
36	Pressure-induced DFT evaluation of MSnI3 (MÂ=ÂK, Rb) perovskites for electronic phase transition and enhanced optoelectronic utilization. Computational and Theoretical Chemistry, 2024, 1233, 114512.	2.5	0
37	Pressure-driven modification of optoelectronic features of ACaCl3 (A = Cs, Tl) for device applications. Heliyon, 2024, 10, e26733.	3.2	0

#	Article	IF	Citations
38	Exploring the influence of pressure-induced semiconductor-to-metal transition on the physical properties of cubic perovskites FrXCl3 (X = Ge and Sn). Heliyon, 2024, 10, e27581.	3.2	0
39	A review: Comprehensive investigation on bandgap engineering under high pressure utilizing microscopic UVâ€“Vis absorption spectroscopy. APL Materials, 2024, 12, .	5.1	0
40	Composition-tunable structural and optical properties of dual-phase cesium tin bromide perovskite semiconductors. Journal of Materials Science: Materials in Electronics, 2024, 35, .	2.2	0